18. Front tibiæ stout, distinctly sinuate within, the broadest part nearer the apex than middle; elytra with series of deeply impressed and closely placed punctures.
myrmex Herbst.
Front tibiæ rather slender, feebly sinuate within, the broadest part about middle
19. Antennal club oval, as long as the three preceding joints together; thorax convex; punctures of elytral series deeply impressed, those of the intervals distinct, remote and slightly smaller than those of the regular series.
ruficornis Casey.
Antennal club elongate-oval, pointed at apex, nearly as long as the preceding
five joints together; punctures of elytral series feebly impressed, those of the
intervals extremely fine and almost absenttexanus n. sp.
20. Eyes separated by much less than half of their own width
Eyes widely separated
21. Head with a few, sparse punctures; between the eyes a large, elongate fovea; elytral setæ very few and short; front femora elongate; elytra strongly widening behind
Head closely and coarsely punctate, without fovea between the eyes; elytral setæ long and abundant, front femora clavate near apex, elytra feebly widening behind
22. Elytral series of punctures distinctly impressedcoræ Champ.
Elytral series of punctures not impressed on the diskscrobicollis Boh.
23. Elytra with a few moderately long, very sparsely placed white setæ on the alternate intervals, except at apex; the rows of punctures not impressed.
lævicollis Horn.
Elytra with long, sparsely placed, white setæ on all the intervals; the rows of punctures visibly impressedspeculator Casey.
24. Very small, elytra distinctly punctate-striate, intervals flat, almost smooth, each interval with only a very few erect, white hairscavirostris Casey.

NEW GENERA AND SPECIES OF NORTH AMERI-CAN CERAMBYCIDÆ.

By H. C. FALL,

PASADENA, CAL.

During the past few years isolated descriptions of a number of new species of longicorns have been drawn up by the writer, and it is thought best to bring these together in a short paper at this time.

It is believed that the species are all sufficiently distinct to warrant this procedure.

Neoclytus modestus, new species.

Piceous, legs brownish, antennæ dark rufous; pubescence of upper surface dark brown, suffused almost throughout with white hairs, which are sparser and less conspicuous posteriorly. Anterior and middle elytral bands reduced to a sutural spot, the latter often entirely lacking; posterior band very narrow, directed obliquely backward from the suture, then curved forward exteriorly; this also sometimes reduced to a sutural spot. Antennæ slightly longer than half the body (3), shorter than half the body (9); head hoary, densely punctate. Prothorax slightly longer than wide, without markings, the white hairs denser along the basal margin; discal asperities small, not confined to the median line. Elytra narrowed posteriorly, scutellum and basal margin rather densely suffused with white; markings of same color; apex obliquely truncate and acuminate. Beneath with white pubescence which is condensed at the posterior margins of the meso- and metasternal episterna; abdomen uniformly sparsely pubescent. Hind thighs not spinose at apex. Length 9-12 mm.

California (Pasadena and Kaweah); collections of Dr. Fenyes, Mr. Hopping and the author.

Rather closely allied to the eastern *longipes*, but differs in its less elongate prothorax, normally reduced markings and uniformly pubescent abdomen.

Neoclytus carus, new species.

Black, prothorax with a straight, median, transverse, pale yellow fascia which is interrupted at middle; the basal margin also narrowly pale. Scutellum densely pale pubescent, base of elytra narrowly suffused with yellowish white hairs, and with three sharply defined pale fasciæ as follows. First fascia at about the basal fourth, a little oblique, nearly straight, slightly narrowed at the middle of its length; median fascia lunate, convex posteriorly, a little more advanced at the suture than exteriorly; third fascia near apical fourth, very narrow, posteriorly oblique and slightly arcuate, apical margin with yellow hairs which extend narrowly along the suture but do not reach the posterior fascia. Beneath with the usual meso- and metepisternal spots, the former whitish, the latter yellow; abdomen with segments I-4 m. margined with yellow posteriorly. Antennæ scarcely half the length of the body (Q). Prothorax slightly elongate, with both median and lateral asperities. Elytra obliquely truncate, the sutural and outer angles slightly prominent. Posterior femora rather feebly clavate, not spinose at tip, hind tibiæ straight and very little widened apically. Length 9-II mm.

Southern California (Mountains near Pasadena).

Two examples only of this very pretty species have been seen. The type was taken by the writer in June at an elevation of about 3,000 ft. A second example in Dr. Fenyes' collection is labeled "Mt. Lowe," elevation not indicated.

This species would perhaps best follow *muricatulus* as our species are at present arranged, but is not very closely related to any.

Neoclytus tenuiscriptus, new species.

Red-brown, scutellum and three elytral fasciæ yellow. First two fasciæ very narrow and approximate, the first a little oblique, nearly straight and of uniform width, bent forward a little at its outer end which is nearly perpendicular to the side margin; second fascia rather strongly anteriorly angulate near the suture, its outer portion strongly oblique and slightly arcuate; posterior fascia just behind the apical fourth, wider than the others, of nearly equal width, oblique, and straight or slightly posteriorly arcuate. Beneath thinly pubescent, lateral episternal spots as usual, hind margin of metasternum and of first ventral segment narrowly yellow; second ventral more broadly margined with yellow especially externally. Prothoracic rugæ mainly confined to the median line, though with traces of lateral elevations in most examples. Thighs strongly pedunculate, hind tibiæ strongly compressed and moderately dilated apically, femora not distinctly spinose at tip. Length 10-12½ mm.

Southern California (Pasadena; Claremont).

Quite closely related to approximatus, in which however the elytral bands are wider, especially the anterior and posterior ones near the suture, and the spacing is also a little different. The elytral apices are obliquely truncate in both species but a little more widely so in approximatus.

Eudistenia, new genus.

Elongate, subcylindrical; palpi not very unequal, terminal joints longer than wide, moderately dilated, truncate; eyes moderately granulated, almost completely divided, the upper lobe small. Antennæ very slender, much longer than the body in the &, equal in length to the body in the Q, not compressed, neither spined nor tuberculate, sparsely hairy beneath, second joint very short, outer joints decreasing in length. Prothorax a little wider than long, rather strongly constricted at base, sides obtusely tuberculate posteriorly. Scutellum obtusely triangular, elytral apices separately rounded. Prosternal process rather narrow but distinctly separating the coxæ, which are rounded and moderately prominent; front and middle coxal cavities angulate externally; metasternal episterna narrow, not much wider in front. Legs moderate, thighs not strongly clavate, tibial spurs short.

This genus is founded on a fine large Californian species whose immediate affinities are not entirely clear. There can be little doubt that it should be placed in the Cerambycini though the eyes are less coarsely granulate than is the rule in this tribe. The ligula is apparently corneous, at least in part, and is broadly rather deeply emarginate. This together with the distinctly visible front trochantins throw it into the group *Œmes*, with the members of which it agrees in the aggregate quite as well as they agree with one another, departing from the majority of them in the narrow more parallel metasternal episterna, less unequal palpi and style of punctuation, which latter is of the type prevailing in *Brothylus*.

Eudistenia costipennis, new species.

Subparallel, dorsum of elytra moderately flattened, pubescence short, recumbent, moderately dense, ochreo-cinereous, elytra with three strongly angulate narrow blackish brown fasciæ, the subapical one less distinctly defined. Head and prothorax finely punctulato-rugose, the latter with an anterior transverse series of four feebly defined tubercles, two discal the others lateral, and with a better marked but obtuse posterior lateral tubercle, behind which the thorax is cylindrically constricted. Elytra a little wider than the thorax, humeri rectangular and narrowly rounded, each with two entire costæ and a short basal inner one, the suture also a little elevated, surface sculpture apparently like that of the head and thorax but more completely concealed by the pubescence except for numerous larger nude punctures irregularly scattered over the surface. Beneath finely punctate and cinereous pubescent. Length 17–23 mm.

Southern California.

Five examples taken by Dr. Fenyes and the writer near the summit of the Sierra Madre mountains above Pasadena, and one example from mountains near Claremont (Baker). One specimen was beaten from live oak, in which the insect probably breeds.

This species bears a somewhat striking superficial resemblance in size and markings to *Distenia undata*.

Aside from the disparity in length of antennæ there is apparently little sexual difference. The fifth ventral is subequal in length to the fourth and rounded at apex in both sexes, but more broadly so in the male.

Leptostytus yuccivorus, new species.

Piceous, clothed rather densely throughout with short, appressed, cinereous pubescence mingled on the elytra with very short erect pale hairs which are inconspicuous except in profile. Antennæ subequal in length to the body, only slightly longer in the male. Prothorax transverse, obtusely tuberculate at sides, the apex of. the tubercle just behind the middle; disk with an elongate median callosity in posterior half and two rounded anterior ones, all feebly elevated and nearly smooth; disk otherwise uniformly moderately closely but not coarsely punctate; pubescence uniformly cinereous except for two apical and two basal spots in the form of a square; flanks sparsely punctate, nearly smooth at middle. Elytra nearly twice as long as wide, about one half wider than the prothorax and nearly five times as long, disk entirely devoid of tubercles or tufts of hair but with three smooth obtuse and slightly elevated longitudinal lines which vary a little in distinctness; pubescence cinereous with more or less evident blackish vittæ toward the side and apex. The raised lines are frequently a little paler than the rest of the surface, the pubescence taking on in consequence an ochreous tint which alternates with the darker vittæ; punctuation dense and rather coarse at base, finer apically; apices not at all truncate. Beneath minutely densely punctulate and uniformly cinereous pubescent; tibiæ feebly annulate, intercoxal process of prosternum narrower than the width of the coxal cavity. Length 13 mm.

Numerous examples taken by Professor Snow at San Bernardino Ranch, Douglas, Arizona, where they were found breeding in stems of yucca. Rather larger than any other species of our fauna; by the latest table it would stand near *perplexus*.

Liopus decorus, new species.

Not very robust, densely clothed with short prostrate cinereous hair, maculate with black as follows: prothorax with two round anterior spots and the median line posteriorly, these usually more or less coalescent and diffuse; elytra with a rather large lateral spot just before the middle, and at the posterior third a common more or less evidently angulate fascia which is more or less irregular and is usually broken up externally into small black spots; there are also small black spots scattered over the surface, those at the middle sometimes imperfectly continuing the median lateral spot to the suture. Punctuation well developed throughout, erect tufts of setæ entirely wanting. Lateral spine of prothorax at the posterior third or fourth. Length 5-6 mm., width 1.8-2.3 mm.

Williams, Arizona. July. Collected by Schwarz and Barber and by the writer.

A very pretty species, which Mr. Schwarz has referred to *centralis* Lec. The latter, however, is more robust, somewhat differently marked, the prothoracic spine is said to be just behind the middle, and the elytra bear small tufts of black scales.

Ataxia sulcata, new species.

Dark brown, nearly parallel, sparsely pubescent with brownish ochreous hairs, with a few white hairs intermixed. Head finely densely punctulate, with scattered coarser punctures. Antennæ (Q) scarcely as long as the body, feebly annulate externally. Prothorax about as long as wide, base evidently wider than the apex, sides broadly arcuate and rather feebly tuberculate at middle, base with a marginal impressed line, disk closely punctate, median line plainly carinate anteriorly in some examples, scarcely so in others. Elytra nearly parallel, broadly rounded and scarcely truncate at apex, each with five or six discal sulci which are gradually shallower externally; sides not sulcate; punctures arranged in nearly regular rows, each having a short semi-erect hair; pubescence otherwise very short and recumbent. Length 12–15 mm.

Florida (Key Largo).

Two examples, both apparently females, received from Mr. Beyer. Distinguishable at once from our other species by the sulcate elytra and very sparse pubescence.

Ataxia setulosa new species.

Rather slender, parallel, very densely clothed with recumbent ochreous hair, with the usual fine suberect setæ arising from the elytral punctures darker in color; elytra also with numerous setiform fascicules each consisting of from three to six

white hairs. Antennæ slightly longer than the body (3), very feebly annulate externally. Prothorax cylindrical, slightly longer than wide, sides straight, strongly tuberculate just before the middle, base and apex nearly equal in width, disk obtusely tuberculate, each side before the middle, median line finely carinate in front and with a narrow line of white hairs in its posterior third. Scutellum white. Elytra parallel, not sulcate, sparsely punctured in series, the sculpture however nearly concealed by the dense vestiture, apex obliquely truncate internally. Length 10–12 mm.

Santa Rosa, Lower California (Beyer).

Unique among our species in the character of the elytral vestiture. Our four species of *Ataxia* separate as follows:

Elytral apices spinose [Southern Florida and Cuba].....spinicauda Schaef. Elytral apices rounded or more or less obliquely truncate.

Elytral disk distinctly sulcate, vestiture very sparse [Southern Florida].

sulcata n. sp.

Elytral disk not sulcate, vestiture dense.

A specimen collected at Cayamas, Cuba, by Mr. Schwarz has been sent me with the label *spinipennis* Chev. attached. This is precisely like a typical example of *spinicauda* received from Mr. Schaeffer. If the Cuban specimen is really Chevrolat's species, *spinicauda* becomes a synonym, but as Mr. Schaeffer remarks, the specimens do not agree very well with Chevrolat's description, and such action is not yet warranted.

Lianema, new genus.

Very slender, cylindrical. Palpi short and unequal but similar in form, the last joint a little dilated and narrowly obliquely truncate at apex. Antennæ exceedingly slender, fully twice as long as the body, nearly invisibly pubescent; first joint about as long as the head, gradually widened, without apical spine; second joint as long as wide and about one fourth the length of the third; joints 3-6 increasing in length, the third scarcely as long as the first, the sixth about twice the length of the first; 6-10 subequal; eleventh nearly as long as the four preceding. Eyes moderately coarsely granulate, deeply emarginate, upper lobe relatively small, separated both above and beneath by a distance equal to half the apical width of the prothorax. Front nearly flat, rather deeply impressed or concave just behind the labrum. Prothorax much longer than wide, cylindrical, slightly dilated before the base, broadly feebly constricted behind the apex, base broadly emarginate from side to side, apex truncate. Elytra subparallel, slightly wider than and more than twice as long as the prothorax, evidently shorter than the abdomen. Prosternum very long before the coxæ, the intercoxal process nearly flat and about half as wide as the coxa; cavities

open behind and angulate externally. Middle coxæ a little more distant than the front ones, mesosternum acutely triangular, metasternum very long; ventral segments subequal, the fifth elongate, narrowly rounded and feebly emarginate posteriorly. Thighs clavate, tibiæ linear, not grooved within; tarsi very slender, subequal in length to the tibiæ, first joint almost as long as the remainder, last joint nearly equal to the two preceding; claws divaricate, dilated a little at base.

This genus is founded on a peculiar little species from Lower California. It must evidently be classed with the Methiini but is remarkably distinct from all our previously established genera in its very long tarsi and rather widely separated front and middle coxæ. It may be placed before *Idamea*.

The type species requires but a short description in addition to the above diagnosis.

Lianema tenuicornis, new species.

Linear, uniformly dark brownish testaceous, very finely and sparsely pubescent, dull. Prothorax alutaceous and finely not closely punctulate, disk before the middle with a minute dentiform tubercle each side the median line. Elytra closely, finely, indistinctly punctulate. Prosternum feebly transversely wrinkled, smooth and shining in front, alutaceous behind, with scattered rather course punctures throughout. Abdomen moderately shining and sparsely punctured. Length 5 mm.

Lower California (El Taste).

A single example, probably a male, collected by Mr. Beyer.

Methia æstiva, new species.

Piceo-testaceous, the elytra with more or less defined alternating pale and dark vittee in fully colored examples; surface dull, finely punctate and moderately pubescent; legs and antennæ hairy. Antennæ much longer than the body in both sexes, second joint very small, button-like, but quite distinct; joints 3-11 slightly decreasing in length. Eyes very large, subcontiguous on the vertex, almost divided. Prothorax as wide as long, scarcely or but very feebly constricted at base and apex, sides moderately arcuate; disk in front with a faint callosity each side the median line. Elytra a little shorter than the abdomen, nearly parallel in the female, a little shorter and evidently narrowed behind in the male, tips a little dehiscent and separately rounded; beneath more shining and with the abdomen less finely and more sparsely punctate than above; thighs not clavate, front tibiæ evidently obliquely grooved within, first tarsal joint subequal to the last, each about as long as the second and third united. Length 5-8½ mm.

Pasadena, California. Attracted to electric lights in August and September.

This species, like the *mormona* of Linell, differs from *Methia* as defined by LeConte in its visible second antennal joint, but seems best referred here for the present. It differs from *mormona* in its

smaller size and different coloration, and in the elytra being shorter than the abdomen (though not very much so) nearly as in typical *Methia*. The fifth ventral in the female is broad, pale in color, triangularly emarginate from side to side, the emargination fringed with capitate hairs in addition to the usual pubescence. In the male the fifth ventral is also broadly though less triangularly emarginate, the following segments visible in and behind the emargination, the pubescence of the usual form.

Class I, HEXAPODA.

Order IV, DIPTERA.

A PRELIMINARY LIST OF NEBRASKA SYRPHIDÆ WITH DESCRIPTIONS OF NEW SPECIES.

By Paul R. Jones, Lincoln, Nebraska.

In making this list of the Nebraska Syrphidæ the writer has examined and included all published records, and determined the collection of the University of Nebraska. I desire to thank Mr. Myron H. Swenk for his criticism and valuable suggestions, and Dr. S. W. Williston for kindly verifying some of my determinations.

1. MICRODON Meigen.

1. Microdon coarctatus Loew.

Three males from Sioux County, Nebraska. Formerly recorded from District of Columbia, Mexico and Florida.

2. Microdon lanceolatus Adams.

Q. Length 11 mm. Head black, subfulgent, covered with yellowish white pile, eyes bare. Antennæ black, first joint a trifle longer than the second and third together, second joint nearly two thirds as long as third joint, third when viewed from side lanceolate as in the male, and subconical when viewed from above; arista basal, bare, a little longer than the third joint, yellowish, darker at the base. Face black, subfulgent, coarsely and sparsely punctured, pile lighter. Thorax black, subfulgent, mesonotum and scutellum thickly yellowish white pilose, pleura more sparsely so, scutellum without spines. Thorax and scutellum more finely punctate than the face. Abdomen black, finely punctate, black pilose except second segment and lateral